

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	(("5660673") or ("6000360")).PN.	USPAT; USOOCR	OR	OFF	2009/12/19 14:12
L2	4	(("5210055") or ("6074518") or ("6974523") or ("6544380")).PN.	USPAT; USOOCR	OR	OFF	2009/12/19 14:41
S1	4	(("4633809") or ("4954201") or ("6074518") or ("6178919")).PN.	USPAT; USOOCR; EPO; JPO	OR	OFF	2003/10/20 07:48
S2	4	"821395"	EPO; DERWENT	OR	OFF	2003/10/17 18:48
S3	764335	h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc"	JPO; DERWENT	OR	OFF	2003/10/17 18:49
S4	11139	(h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma and (confin\$5 contain\$5)	JPO; DERWENT	OR	OFF	2003/10/17 18:50
S5	7053	(h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5 contain\$5)	JPO; DERWENT	OR	OFF	2003/10/17 18:52
S6	1773	((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5 contain\$5)) and (electrode cathode anode)	JPO; DERWENT	OR	OFF	2003/10/17 18:53
S7	646	(((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5 contain\$5)) and (electrode cathode anode)) and etch\$3	JPO; DERWENT	OR	OFF	2003/10/17 18:51
S8	3	(((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5 contain\$5)) and (electrode cathode anode)) and shroud	JPO; DERWENT	OR	OFF	2003/10/17 18:51
S9	476	(h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5)	JPO; DERWENT	OR	OFF	2003/10/17 18:53
S10	194	((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5)) and (electrode cathode anode)	JPO; DERWENT	OR	OFF	2007/09/29 19:14
S11	5	(("6387817") or ("6350317") or ("6008130") or ("5647912") or ("5210055")).PN.	USPAT; USOOCR; EPO; JPO	OR	OFF	2003/10/17 19:47

S12	3303	plasma with confin\$5	USPAT	OR	ON	2003/10/18 17:06
S13	4605	118/723\$.ccls. 156/345\$.ccls.	USPAT	OR	ON	2003/10/18 17:07
S14	680	((plasma with confin\$5) and (118/723\$.ccls. 156/345\$.ccls.)	USPAT	OR	ON	2003/10/18 17:07
S15	545	((plasma with confin\$5) and (118/723\$.ccls. 156/345\$.ccls.)) and (electrode cathode anode)	USPAT	OR	ON	2003/10/18 17:08
S16	3004	156/345\$.ccls.	USPAT	OR	ON	2003/10/18 17:07
S17	2574	118/723\$.ccls.	USPAT	OR	ON	2003/10/18 17:07
S18	396	(plasma with confin\$5) and 156/345\$.ccls.	USPAT	OR	ON	2003/10/18 17:08
S19	500	(plasma with confin\$5) and 118/723\$.ccls.	USPAT	OR	ON	2003/10/18 17:08
S20	403	((plasma with confin\$5) and 118/723\$.ccls. ) and (electrode cathode anode)	USPAT	OR	ON	2003/10/18 17:08
S21	6	(((plasma with confin\$5) and (118/723\$.ccls. 156/345\$.ccls.)) and (electrode cathode anode)) and shroud	USPAT	OR	ON	2003/10/18 17:08
S22	327	((plasma with confin\$5) and 156/345\$.ccls.) and (electrode cathode anode)	USPAT	OR	ON	2003/10/18 17:46
S23	218	(((plasma with confin\$5) and 118/723\$.ccls. ) and (electrode cathode anode)) not (((plasma with confin\$5) and 156/345\$.ccls.) and (electrode cathode anode))	USPAT	OR	ON	2003/10/18 18:04
S24	60	("4431901"   "4844775"   "494915"   "4948458"   "5122251"   "5178739"   "5226967"   "5231334"   "5234529"   "5277751"   "5280154"   "5304279"   "5309063"   "5368710"   "5401350"   "5421891"   "5430355"   "5436528"   "5464476"   "5556521"   "5558722"   "5560776"   "5565738"   "5580385"   "5587038"   "5587226"   "5589737"   "5591493"   "5619103"   "5648701"   "5650032"   "5669975"   "5683537"   "5685941"   "5688357"   "5710486"   "5711850"   "5716451"	USPAT	OR	OFF	2003/10/18 18:00

		"5753044"   "5759280"   "5763851"   "5772832"   "5783492"   "5785878"   "5800619"   "5800688"   "5824158"   "5824607"   "5874704"   "5888413"   "5891349"   "5897712"   "5897713"   "5907221"   "5919382"   "5948215"   "5976334"   "6149760"   "6237526"   "6245202").PN.				
S25	4	(("5099100") or ("6494998") or ("6170429") or ("5879523")).PN.	USPAT; USOCP; EPO; JPO	OR	OFF	2003/10/18 18:04
S26	37999	(electrode cathode anode) with silicon	USPAT	OR	ON	2003/10/18 18:54
S27	1048	(electrode cathode anode) with "silicon carbide"	USPAT	OR	ON	2003/10/18 18:54
S28	1490	((electrode cathode anode) with silicon) same resistivity	USPAT	OR	ON	2003/10/18 19:10
S29	40	((electrode cathode anode) with "silicon carbide") same resistivity	USPAT	OR	ON	2003/10/18 18:55
S30	21	(((electrode cathode anode) with silicon) same resistivity) and (118/723\$.cls. 156/345 \$.cls.)	USPAT	OR	ON	2003/10/18 19:04
S31	8158	silicon with resistivity	USPAT	OR	ON	2003/10/18 19:11
S32	418	"silicon carbide" with resistivity	USPAT	OR	ON	2003/10/18 19:11
S33	418	"silicon carbide" with (resistivity resistivities)	USPAT	OR	ON	2003/10/18 19:11
S34	8159	silicon with (resistivity resistivities)	USPAT	OR	ON	2003/10/18 19:11
S35	99	(silicon with (resistivity resistivities)) and (118/723\$.cls. 156/345\$.cls.)	USPAT	OR	ON	2004/05/27 16:13
S36	29	("silicon carbide" with (resistivity resistivities)) and (118/723\$.cls. 156/345\$.cls.)	USPAT	OR	ON	2004/05/27 16:12
S37	18	("2951960"   "2967926"   "3355615"   "3610986"   "4458180"   "4570106"   "4888518"   "5053678"   "5218271"   "5256931"   "5558717"   "5576600"   "5866986"   "5868848"   "5885358"   "5942074"   "6075321"   "6352591").PN.	USPAT	OR	OFF	2003/10/18 19:18

S38	70	((silicon with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.)) not (("silicon carbide" with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.))	USPAT	OR	ON	2003/10/18 20:31
S39	4	(("6244211") or ("5865896") or ("5685949") or ("5292399")).PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/10/18 20:31
S40	1	("5648000").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/10/20 07:48
S41	1	("6149730").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/11/17 16:01
S42	32	("silicon carbide" with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.)	USPAT	OR	ON	2004/05/27 16:13
S43	106	(silicon with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.)	USPAT	OR	ON	2004/05/27 16:13
S44	3	(("silicon carbide" with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.)) not @pd<="20031001"	USPAT	OR	ON	2004/05/27 16:14
S45	7	((silicon with (resistivity resistivites)) and (118/723\$.cls. 156/345\$.cls.)) not @pd<="20031001"	USPAT	OR	ON	2004/05/27 16:15
S46	200	((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5)) and (electrode cathode anode)	JPO; DERWENT	OR	OFF	2004/05/27 16:15
S47	1	((h01l021\$.ipc. c23c016\$.ipc. "h01j037\$.ipc") and plasma with (confin\$5)) and (electrode cathode anode) not @pd<="20031001"	JPO; DERWENT	OR	ON	2004/05/27 16:16
S48	64	(118/723e.cls. 156/345.43.cls. 156/345.44.cls. 156/345.45.cls. 156/345.46.cls. 156/345.47.cls.) not @pd<="20031001"	USPAT	OR	ON	2004/05/27 16:21
S49	7	benzing-david\$.in.	USPAT	OR	ON	2005/07/20 18:54
S50	2	kadkhodayan-babak\$.in.	USPAT	OR	ON	2005/07/20 18:55
S51	594	"lam research".as.	USPAT	OR	ON	2004/05/27 16:25
S52	176	"lam research".as. and (plasma with (confin\$6 shield \$3 lin\$4))	USPAT	OR	ON	2004/05/27 16:27

S53	87	"lam research".as. and (plasma with (confin\$6))	USPAT	OR	ON	2004/05/27 16:31
S54	284	electrode with showerhead	USPAT	OR	ON	2004/05/27 16:33
S55	47	(electrode with showerhead) and 118/723e.ccls.	USPAT	OR	ON	2004/05/27 16:33
S56	156	(gas adj2 inlet) with showerhead	USPAT	OR	ON	2004/05/27 18:12
S57	20	((gas adj2 inlet) with showerhead) and 118/723e.ccls.	USPAT	OR	ON	2004/05/27 16:36
S58	136	((gas adj2 inlet) with showerhead) not (((gas adj2 inlet) with showerhead) and 118/723e.ccls.)	USPAT	OR	ON	2004/05/27 17:25
S59	7557	slot\$ with (millimeter\$ "mm")	USPAT	OR	ON	2004/05/27 17:29
S60	9	(slot\$ with (millimeter\$ "mm")) and 118/723e.ccls.	USPAT	OR	ON	2004/05/27 17:30
S61	125895	slot\$ with (length width height depth diameter wiide)	USPAT	OR	ON	2004/05/27 17:34
S62	28	(slot\$ with (length width height depth diameter wiide)) and 118/723e.ccls.	USPAT	OR	ON	2004/05/27 17:34
S63	172422	hole\$ with (length width height depth diameter wiide)	USPAT	OR	ON	2004/05/27 17:34
S64	132	(slot\$ with (length width height depth diameter wiide)) and 156/345\$.ccls.	USPAT	OR	ON	2004/05/27 17:35
S65	117	((slot\$ with (length width height depth diameter wiide)) and 156/345\$.ccls.) not ((slot\$ with (length width height depth diameter wiide)) and 118/723e.ccls.)	USPAT	OR	ON	2004/05/27 17:45
S66	11	"6178919"	USPAT	OR	ON	2004/05/27 17:45
S67	1	("6178919").PN.	USPAT; USOCR	OR	OFF	2004/05/27 18:00
S68	5	("4464223"   "5534751"   "5605637"   "5900103"   "6051100").PN.	USPAT	OR	OFF	2004/05/27 17:45
S69	1	(*6178919).PN.	USOCR; DERWENT	OR	OFF	2004/05/27 18:09
S70	1	2000-611214.NRAN.	DERWENT	OR	OFF	2004/05/27 18:01
S71	2322	((inlet\$ pip\$4) with shower)	USPAT	OR	ON	2004/05/27 18:19
S72	87	(((inlet\$ pip\$4) with shower) ) and 118/723\$.ccls.	USPAT	OR	ON	2004/05/27 18:21

S73	156	(gas adj2 inlet) with showerhead	USPAT	OR	ON	2004/05/27 18:12
S74	87	((inlet\$ pip\$4) with shower) and 118/723\$.cls.) not ((gas adj2 inlet) with showerhead)	USPAT	OR	ON	2004/05/27 18:12
S75	3296	((inlet\$ pip\$4) same shower)	USPAT	OR	ON	2004/05/27 18:19
S76	108	((inlet\$ pip\$4) same shower) and 118/723\$.cls.	USPAT	OR	ON	2004/05/27 18:19
S77	21	(((inlet\$ pip\$4) same shower) and 118/723\$.cls.) not (((inlet\$ pip\$4) with shower) and 118/723\$.cls.)	USPAT	OR	ON	2004/05/27 18:19
S78	90	(((inlet\$ pip\$4) with shower) and 156/345\$.cls.	USPAT	OR	ON	2004/05/27 18:21
S79	36	(((inlet\$ pip\$4) with shower) and 156/345\$.cls.) not (((inlet\$ pip\$4) with shower) and 118/723\$.cls.)	USPAT	OR	ON	2004/05/27 18:22
S80	36	((((inlet\$ pip\$4) with shower) and 156/345\$.cls.) not (((inlet\$ pip\$4) with shower) and 118/723\$.cls.)) not (((inlet\$ pip\$4) same shower) and 118/723\$.cls.)	USPAT	OR	ON	2004/05/27 18:38
S81	5	("5685949") or ("5411624") or ("5147497") or ("5891350") or ("6089183").PN.	USPAT; USOOR	OR	OFF	2004/05/27 18:38
S82	1	("4954201").PN.	USPAT; USOOR	OR	OFF	2004/06/01 13:00
S83	12	"821395"	USPAT; EPO; DERWENT	OR	OFF	2004/06/01 13:01
S85	622	(118/723r).OCLS.	USPAT	OR	OFF	2005/02/04 15:19
S86	1048	(118/723e).OCLS.	USPAT	OR	OFF	2005/02/04 15:15
S87	82	(156/916).OCLS	USPAT	OR	OFF	2005/02/04 15:15
S88	584	((156/345.43) or (156/345.44) or (156/345.45) or (156/345.46) or (156/345.47)).OCLS.	USPAT	OR	OFF	2005/02/04 15:20
S89	1375	S86 S88	USPAT	OR	OFF	2005/02/04 15:20
S90	60	S89 not @pd<="20040501"	USPAT	OR	OFF	2005/07/20 18:58

S91	8	benzing-david\$.in.	USPAT	OR	ON	2005/07/20 18:57
S92	2	kadkhodayan-babak\$.in.	USPAT	OR	ON	2005/07/20 18:55
S93	10	S91 S92	USPAT	OR	ON	2005/07/20 18:55
S94	1	S93 not @pd<="20040501"	USPAT	OR	ON	2005/07/20 18:56
S95	11	benzing-david\$.in. kadkhodayan-babak\$.in.	US-PGPUB; EPO; JPO; DERWENT	OR	ON	2005/07/20 18:57
S96	1084	(118/723e).CCLS.	USPAT	OR	OFF	2005/07/20 19:00
S97	610	((156/345.43) or (156/345.44) or (156/345.45) or (156/345.46) or (156/345.47)).CCLS.	USPAT	OR	OFF	2005/07/20 19:00
S98	1418	S96 S97	USPAT	OR	OFF	2005/07/20 19:00
S99	43	S98 not @pd<="20050201"	USPAT	OR	OFF	2005/07/20 19:01
S100	705	156/916.cds. 118/723r.cds.	USPAT	OR	OFF	2005/07/20 19:00
S101	1880	S96 S97 S100	USPAT	OR	OFF	2005/07/20 19:00
S102	52	S101 not @pd<="20050201"	USPAT	OR	OFF	2007/09/29 19:13
S106	947	(contain\$4 confin\$5 louver \$3).clm. and (cylindrical cylinder).clm. and (electrode cathode anode).clm.	US-PGPUB	OR	ON	2005/07/20 19:11
S107	42	(contain\$4 confin\$5 louver \$3).clm. and (cylindrical cylinder).clm. and (electrode cathode anode).clm. and (ground).clm. and (power). clm.	US-PGPUB	OR	ON	2005/07/20 19:14
S108	433	(contain\$4 confin\$5 louver \$3).clm. and (cylindrical cylinder).clm. and (electrode cathode anode).clm. and (hole open\$4).clm.	US-PGPUB	OR	ON	2005/07/20 19:17
S109	222	(contain\$4 confin\$5 louver \$3).clm. and (cylindrical cylinder).clm. and (electrode cathode anode).clm. and (chamber reactor vessel housing).clm.	US-PGPUB	OR	ON	2005/07/20 19:17

S110	45	(contain\$4 confin\$5 louver (\$3).clm. and (cylindrical cylinder).clm. and (electrode cathode anode).clm. and (hole open\$4).clm. and (chamber reactor vessel housing).clm. and (plasma).clm.	US-PGPUB	OR	ON	2005/07/20 19:18
S111	40	S110 not S107	US-PGPUB	OR	ON	2005/07/20 19:18
S112	12	("4981722"   "5099100"   "5213658"   "5217560"   "5234529"   "5246532"   "5292396"   "5362353"   "5364488"   "5391252"   "5534751"   "5552124").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/11/08 15:38
S113	1	("6178919").PN.	USPAT; USOCR	OR	OFF	2007/09/29 19:10
S114	1	("6178919").PN.	DERWENT	OR	OFF	2007/09/29 19:10
S115	1	2000-611214.NRAN.	DERWENT	OR	OFF	2007/09/29 19:55
S116	1151	(118/723e).COLS.	USPAT	OR	OFF	2007/09/29 19:13
S117	692	((156/345.43) or (156/345.44) or (156/345.45) or (156/345.46) or (156/345.47)).COLS.	USPAT	OR	OFF	2007/09/29 19:13
S118	790	156/916.cds. 118/723r.cds.	USPAT	OR	OFF	2007/09/29 19:13
S119	2050	S116 S117 S118	USPAT	OR	OFF	2007/09/29 19:13
S120	172	S119 not @pd<="20050701"	USPAT	OR	OFF	2007/09/29 19:18
S121	14	benzing-david\$.in. kadkhodayan-babak\$.in.	US-PGPUB; EPO; JPO; DERWENT	OR	ON	2007/09/29 19:13
S122	3	S121 not @pd<="20050701"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/09/29 19:18
S123	288	((h01l021\$.ipc. c23c016\$. ipc. h01j037\$.ipc.) and plasma with (confin\$5)) and (electrode cathode anode)	JPO; DERWENT	OR	OFF	2007/09/29 19:14
S125	191	S123 not @pd>="20010601"	JPO; DERWENT	OR	OFF	2007/09/29 19:29
S126	88	(156/916).COLS.	USPAT; USOCR	OR	OFF	2007/09/29 19:30
S127	1	"09008009"	JPO	OR	OFF	2007/09/29 19:57

S128	1	"08339895"	JPO	OR	OFF	2007/09/29 19:59
S129	1	"2000058518"	JPO	OR	OFF	2007/09/29 19:59
S130	2111	confin\$3 with ground\$3	USPAT	OR	ON	2008/03/12 00:20
S131	6172	118/723\$.cdls. 156/345\$.cdls.	USPAT	OR	ON	2008/03/12 00:20
S132	84	S131 and S130	USPAT	OR	ON	2008/03/12 00:20
S133	14	("4464223"   "4632719"   "5006192"   "5271788"   "5465757"   "5534751"   "5605637"   "5900103"   "5998932"   "6019060"   "6051100"   "6074518"   "6279504"   "6444087").PN.	US-PGPUB; USPAT; USOOR	OR	OFF	2008/03/12 01:19
S134	15	("4464223"   "4579618"   "4612207"   "5399254"   "5464499"   "5534751"   "5998932"   "6008130"   "6019060"   "6098568"   "6106663"   "6178919"   "6270618"   "6527911"   "6602381").PN.	US-PGPUB; USPAT; USOOR	OR	OFF	2008/03/12 01:19
S135	521	confin\$3 with ground\$3	US-PGPUB	OR	ON	2008/03/12 01:24
S136	3650	118/723\$.cdls. 156/345\$.cdls.	US-PGPUB	OR	ON	2008/03/12 01:25
S137	25	S135 and S136	US-PGPUB	OR	ON	2008/03/12 01:25
S138	306	confin\$3 with ground\$3	JPO; DERWENT	OR	ON	2008/03/12 01:29
S139	406874	h01l021\$.ipc. c23c016\$.ipc.	JPO; DERWENT	OR	OFF	2008/03/12 01:30
S140	406874	h01l021\$.ipc. c23c016\$.ipc.	JPO; DERWENT	OR	OFF	2008/03/12 01:31
S141	406874	h01l021\$.ipc. c23c016\$.ipc.	JPO; DERWENT	OR	ON	2008/03/12 01:31
S142	5	S138 and S141	JPO; DERWENT	OR	ON	2008/03/12 01:31
S143	410760	(contain\$5 confin\$6 louver \$3) with (ground\$3 conduct \$3 metal\$2)	USPAT	OR	ON	2008/03/27 17:08
S144	6177	118/723\$.cdls. 156/345\$.cdls.	USPAT	OR	ON	2008/03/27 17:09
S145	1191	S143 and S144	USPAT	OR	ON	2008/03/27 17:09
S146	182736	(contain\$5 confin\$6 louver \$3) with (ground\$3 conduct \$3)	USPAT	OR	ON	2008/03/27 17:09

S147	10006	(confin\$6 louver\$3) with (ground\$3 conduct\$3)	USPAT	OR	ON	2008/03/27 17:09
S148	165	S147 and S144	USPAT	OR	ON	2008/03/27 17:09
S149	1	("6074518").PN.	USPAT; USOOR	OR	OFF	2008/08/03 23:11
S150	6264	118/723\$ cols. 156/345\$. cols.	USPAT	OR	ON	2008/08/03 23:38
S151	10125	(confin\$6 louver\$3) with (ground\$3 conduct\$3)	USPAT	OR	ON	2008/08/03 23:38
S152	167	S151 and S150	USPAT	OR	ON	2008/08/03 23:38
S153	2	S152 not @pd<="20080301"	USPAT	OR	ON	2008/08/03 23:38
S154	749	(118/723r).COLS.	USPAT	OR	OFF	2008/08/03 23:39
S155	1184	(118/723e).COLS.	USPAT	OR	OFF	2008/08/03 23:39
S156	91	(156/916).COLS.	USPAT	OR	OFF	2008/08/03 23:39
S157	722	((156/345.43) or (156/345.44) or (156/345.45) or (156/345.46) or (156/345.47)).COLS.	USPAT	OR	OFF	2008/08/03 23:39
S158	2111	S154 S155 S156 S157	USPAT	OR	ON	2008/08/03 23:39
S159	28	S158 not @pd<="20080301"	USPAT	OR	ON	2008/08/03 23:40
S160	1	("6974523").PN.	USPAT; USOOR	OR	OFF	2008/08/03 23:42
S161	94	(156/916).COLS.	USPAT; USOOR	OR	OFF	2009/12/19 11:28
S162	11430	156/345\$.cols. 118/723\$. cols.	US-PGPUB; USPAT	OR	OFF	2009/12/19 11:33
S163	487	S162 and ((confin\$5 louver baffle) with (mov\$4 vertical up down elevat\$3 lift\$3 adjust\$3 rais\$3 push\$3))	US-PGPUB; USPAT	OR	OFF	2009/12/19 11:36
S164	8	(("5210055") or ("4633809") or ("6074518") or ("6974523") or ("6508199") or ("5660673") or ("5900103") or ("7255773")). PN	USPAT; USOOR	OR	OFF	2009/12/19 11:58
S165	1	"08339895"	JPO	OR	OFF	2009/12/19 12:17
S166	1	"11040553"	JPO	OR	OFF	2009/12/19 12:19

S167	1	"08148295"	JPO	OR	OFF	2009/12/19 12:38
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**EAST Search History (Interference)**

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**12/19/2009 3:29:17 PM**  
**C:\Documents and Settings\ACowell\My Documents\EAST\Workspaces\10-581522 vertically moving confinement ring mounted on susceptor.wsp**